Attorney's Docket No.: 06275-434US1 / 100757-1P US

Applicant: Burrows et al.
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## Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

## Listing of Claims:

## 1. (Original) A compound of formula (1):

$$(D)_{m} O O R^{4} R^{3}$$

$$R^{1} R^{8}$$

formula (1)

wherein Z is selected from -CONR<sup>15</sup>OH and -N(OH)CHO;

R<sup>15</sup> is hydrogen or C<sub>1-3</sub>alkyl;

wherein  $R^1$  is hydrogen or a group selected from  $C_{1\text{-}6}$ alkyl,  $C_{2\text{-}6}$ alkenyl,  $C_{2\text{-}6}$ alkynyl,  $C_{3\text{-}7}$ cycloalkyl,  $C_{5\text{-}7}$ cycloalkenyl, aryl, heteroaryl and heterocyclyl where the group is optionally substituted by one or more substituents independently selected from halo, nitro, cyano, trifluoromethyl, trifluoromethoxy,  $C_{1\text{-}4}$ alkyl,  $C_{2\text{-}4}$ alkenyl,  $C_{2\text{-}4}$ alkynyl,  $C_{3\text{-}6}$ cycloalkyl (optionally substituted by one or more  $R^{17}$ ), aryl (optionally substituted by one or more  $R^{17}$ ), heterocyclyl,  $C_{1\text{-}4}$ alkoxycarbonyl,  $-OR^5$ ,  $-SR^2$ ,  $-SO_2R^2$ ,  $-COR^2$ ,  $-CO_2R^5$ ,  $-CONR^5R^6$ ,  $-NR^{16}COR^5$ ,  $-SO_2NR^5R^6$  and  $-NR^{16}SO_2R^2$ ;  $R^{16}$  is hydrogen or  $C_{1\text{-}3}$ alkyl;

 $R^{17}$  is selected from halo,  $C_{1-6}$ alkyl,  $C_{3-6}$ cycloalkyl and  $C_{1-6}$ alkoxy;

 $R^2$  is group selected from  $C_{1-6}$ alkyl,  $C_{3-6}$ cycloalkyl,  $C_{5-7}$ cycloalkenyl, heterocycloalkyl, aryl, heteroaryl, aryl $C_{1-4}$ alkyl and heteroaryl $C_{1-4}$ alkyl where the group is optionally substituted by one or more halo;

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 $R^5$  is hydrogen or a group selected from  $C_{1-6}$ alkyl,  $C_{3-6}$ cycloalkyl,  $C_{5-7}$ cycloalkenyl, heterocycloalkyl, aryl, heteroaryl, aryl $C_{1-4}$ alkyl and heteroaryl $C_{1-4}$ alkyl where the group is optionally substituted by one or more halo;

R<sup>6</sup> is hydrogen, C<sub>1-6</sub>alkyl or C<sub>3-6</sub>cycloalkyl;

or R<sup>5</sup> and R<sup>6</sup> together with the nitrogen to which they are attached form a heterocyclic 4- to 7-membered ring;

wherein  $R^8$  is hydrogen or a group selected from  $C_{1-6}$ alkyl,  $C_{3-7}$ cycloalkyl and heterocyclyl where the group is optionally substituted by one or more substituents independently selected from halo, nitro, cyano, trifluoromethyl, trifluoromethoxy and  $C_{1-4}$ alkyl;

or  $R^1$  and  $R^8$  together form a carbocyclic or saturated heterocyclic 3- to 6-membered ring; wherein  $R^3$  and  $R^4$  are independently hydrogen,  $C_{1-6}$ alkyl,  $C_{3-6}$ cycloalkyl,  $C_{5-7}$ cycloalkenyl, heterocyclyl, aryl or heteroaryl;

wherein n is 0 or 1;

wherein m is 0 or 1;

wherein D is hydrogen, C<sub>1-4</sub>alkyl, C<sub>3-6</sub>cycloalkyl or fluoro;

wherein X is  $-(CR^9R^{10})-Q-(CR^{11}R^{12})_u$  where u is 0 or 1;

Q is O, S, SO or SO<sub>2</sub>;

 $R^9$ ,  $R^{10}$ ,  $R^{11}$  and  $R^{12}$  are independently selected from hydrogen,  $C_{1\text{-4}}$  alkyl and  $C_{3\text{-6}}$  cycloalkyl; wherein B is  $C_{2\text{-4}}$  alkenyl or  $C_{2\text{-4}}$  alkynyl, each being optionally independently substituted by a group selected from  $C_{1\text{-4}}$  alkyl,  $C_{3\text{-6}}$  cycloalkyl, heterocycloalkyl, aryl, heteroaryl, heterocyclyl whereby the group is optionally substituted by one or more halo, nitro, cyano, trifluoromethyl, trifluoromethoxy,  $-CONHR^{13}$ ,  $-CONHR^{13}R^{14}$ ,  $-SO_2R^{13}$ ,  $-SO_2NHR^{13}$ ,  $-SO_2NR^{13}R^{14}$ ,  $-NHSO_2R^{13}$ ,  $C_{1\text{-4}}$  alkyl and  $C_{1\text{-4}}$  alkoxy;

 $R^{13}$  and  $R^{14}$  are independently hydrogen,  $C_{1\text{--}4}$ alkyl or  $C_{3\text{--}5}$ cycloalkyl;

or R<sup>13</sup> and R<sup>14</sup> together with the nitrogen to which they are attached form a heterocyclic 4 to 7-membered ring.

or a pharmaceutically acceptable salt or in vivo hydrolysable ester thereof.

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2. (Original) A compound according to claim 1 wherein X is -(CH<sub>2</sub>)-O- or -(CH<sub>2</sub>)-O- $(CH_2)-.$ 

- (Currently amended) A compound according to claim 1 or 2 wherein B is C2-4alkenyl or 3. C<sub>2-4</sub>alkynyl, each being optionally independently substituted by C<sub>1-4</sub>alkyl, C<sub>3-6</sub>cycloalkyl, aryl, heteroaryl or heterocycloalkyl.
- 4. (Currently amended) A compound according to any one of claims 1 to 3 claim 1 wherein  $R^1$  is hydrogen,  $C_{1\text{-}6}$  alkyl or aryl where  $C_{1\text{-}6}$  alkyl or aryl are optionally substituted by one or more substituents independently selected from C<sub>1-4</sub>alkyl, aryl (optionally substituted by R<sup>17</sup>) and heteroaryl (optionally substituted by R<sup>17</sup>) and wherein R<sup>17</sup> is halo or C<sub>1-4</sub>alkyl.
- 5. (Cancelled)
- 6. (Currently amended) A method, the method comprising treating a disease condition mediated by one or more metalloproteinase enzymes by administering to a warm-blooded animal in need of such treatment an effective amount The use of a compound according to any one of claims 1 to 4 claim 1 in the manufacture of a medicament in the treatment of a disease condition mediated by one or more metalloproteinase enzymes.
- 7. (Currently amended) A method, the method comprising treating a disease condition mediated by TNFα by administering to a warm-blooded animal in need of such treatment an effective amount The use of a compound according to any one of claims 1 to 4 claim 1 in the manufacture of a medicament in the treatment of a disease condition mediated TNFa.
- 8. (Currently amended) A method of treating autoimmune disease, allergic/atopic diseases, transplant rejection, graft versus host disease, cardiovascular disease, reperfusion injury and

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malignancy in a warm-blooded animal, such as man, in need of such treatment which comprises administering to said animal an effective amount of a compound according to claim 1.

- 9. (Currently amended) A pharmaceutical composition comprising a compound according to any one of claims 1 to 4 claim 1; and a pharmaceutically-acceptable diluent or carrier.
- 10. (Original) A process for preparing a compound according to claim 1 comprising, when Z is -N(OH)CHO, the step of:
- converting a hydroxylamine of formula (2) into a compound of formula (1); a)

or when Z is -CONR<sup>15</sup>OH, the step of:

b) converting an acid of formula (14) into a compound of formula (1);

and thereafter if necessary:

- i) converting a compound of formula (1) into another compound of formula (1);
- ii) removing any protecting groups;
- iii) forming a pharmaceutically acceptable salt or in vivo hydrolysable ester.
- 11. (Original) Ethyl 4-(pyrimidin-2-yl)butanoate.

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N O

12. (Original) A process comprising the reaction of a 2-halopyrimidine, 2-tosylpyrimidine, 2-pyrimidinyl triflate or 2-pyrimidinyl mesylate with 4-ethoxy-4-oxo-butylzinc bromide or 4-ethoxy-4-oxo-butylzinc iodide in the presence of a catalyst;

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wherein X is halo, triflate or mesylate and Y is bromide or iodide.

- 13. (Original) A process according to claim 11 wherein the catalyst is generated from bis(acetonitrile) palladium (II) dichloride and triphenylphosphine.
- 14. (Currently amended) <u>A method of effecting a Negishi coupling reaction</u>, the method <u>comprising performing the reaction in the presense of The use of bis(acetonitrile) palladium (II) dichloride and triphenylphosphine in a Negishi coupling reaction.</u>